

LA-UR-20-23428

Approved for public release; distribution is unlimited.

Title: Getting things done onsite: Heat Source production never ramps down

Author(s): Lunn, Maureen Elizabeth

Intended for: Web

Issued: 2020-05-06

Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Getting things done onsite: Heat Source production never ramps down

The 90-member team at TA-55 finds new ways to keep working efficiently and safely



Technician Keven Castillo Quintana works on manufacturing heat sources in PF-4.

The COVID-19 pandemic has changed many norms in the world and at LANL. During the rapid transition of sending many to work from home in March, some programs were deemed mission critical, with the expectation to continue driving their missions forward. One of those essential programs is Heat Source Technologies, a group within the Actinide Material Power & Processing (AMPP) Division at TA-55.

Some programs never left

Within the Associate Laboratory Directorate of Weapons Production (ALDWP), the group responsible for the Pu-238 heat sources continued their work nearly uninterrupted as many others made the mandatory transition to work remotely. This group, known as AMPP-1, Heat Source Technologies, works on the production line producing heat sources from Plutonium (Pu)-238, which is an essential mission for National Security. This group is comprised of nearly 90 employees and operates out of the TA-55 Plutonium Facility (PF-4 and PF-5) producing heat sources. Heat source production includes the operations that purify, process, and weld Pu-238 oxide into encapsulated heat sources that are essential for space and defense missions.

It isn't business as usual

While this important program is still moving forward to meet milestones, the way the mission is accomplished has changed. The group quickly refocused how it conducted work by bringing only the critical people on-site when needed for specific parts of production. On any given day, roughly half of the group is working from home while the other half is working on-site.



Technician John Hart works on manufacturing heat sources in PF-5.

“We bring people in to perform their necessary production process, and once they are done, they return to work from home,” Sam Harwood, First Line Manager for the Welding Team, said. “Our people are extremely mission focused during this time, they get in, get the job done, and get out.”

With this new but equally hardworking mindset, production in many ways is more efficient. AMPP-1 is diligently moving forward to meet deliverables.

Planning is important, but communication is key

In order to predict a dependent linear production line, coordinate support organizations, and ensure the right people are on site at the right time, communication within the group and across support organizations is paramount. But despite challenges, the group successfully synchronized schedules and planning across their six internal teams and fifteen external support organizations through a variety of daily communications. “It’s been a challenge for us to schedule our ‘day-to-day’, for example, when we’ll work from home vs. when we’ll be needed in PF-4 for sample analysis,” Nell Carver, a scientist on the Pu-238 Analytical Chemistry Team, said. “It’s frustrating when things change so often, but we’ve been up to the challenge and our team has used this as an opportunity to improve our skills for communication, patience and being flexible.”

Daily work is different

The employees of AMPP-1, along with the other ALDWP mission critical programs, are having a very different daily experience at work, even as their production continues. Taped X’s on the floor for social

distancing, new procedures for sanitizing work areas, and a bit more space in the parking lots all serve as constant reminders that things aren't normal. But continued vigilance in safety and security remains unchanged. ALDWP put together a team to review mitigating the COVID-19 hazard while performing production processes, especially glovebox work. That team is diligently working to ensure production processes are preformed safely with respect to mitigating COVID-19 hazards.

Controls including health checks, face masks, gloves, and eye protection are being carefully considered when six foot distancing cannot be maintained. "Our employees have had some concerns about working on site during this time, but we keep communications open and directly address their concerns," Cresta Bateman, First Line Manager for the Assembly and Testing team, said. "We're all in this together, and conducting work safely is everyone's responsibility. We are emphasizing meticulous and deliberate work."

Stronger together

AMPP-1 is a success story for conducting work on site during this difficult time. The group has bonded through adversity, and is proud of their contributions. It's common to see employees regularly checking on each other when working from home, and those on site are considerate for each other by taking precautions to minimize the COVID-19 risk to others. And they're still trying to celebrate normal events together (from a distance) such as birthdays, hiring new employees, and even welcoming a new baby to the world. But all of this is not without some personal sacrifice. "We have many employees that make personal sacrifices to make sure they are on site to meet the mission. For example, single parents and dual mission essential parents," Matthew McGovern, First Line Manager for the Metallography, Surveillance, and Characterization team, said. "We recognize that and we are grateful to for their selfless commitment to the mission."

Mission First, People Always

"Our focus from day one and always is keeping our people safe, but we do have an important mission. We have to balance those two priorities." Jane Lloyd, AMPP-1 Group Leader, said. The focus to ensure people minimize their time on site while maximizing production output seems like the new normal. Although many employees talk about hoping everything returns to normal sooner, it is perhaps best stated by Allen Arellano, Lead Tech on the Welding team in AMPP-1: "Being essential in this time is an encouraging reminder of how important our work is for our nation. While there are new challenges, the mission remains the same. We are doing our best to work within the new COVID-19 guidelines and not neglecting the hazards that previously existed."